



EverMore series GPS module GM-R700 is a high sensitivity ultra low power consumption cost efficient, compact size; plug & play GPS module board designed for a broad spectrum of OEM system applications. This product is based on the proven technology found in 16 channel GPS receivers and NEMERIX chipset solution. The GPS module receiver will track up to 16 satellites at a time while providing fast time-to-first-fix and 1Hz navigation updates. Its far reaching capability meets the sensitivity & accuracy requirements of car navigation as well as other location-based applications, such as AVL system. Handheld navigator, PDA, pocket PC, or any battery operated navigation system.

The GM-R700 design utilizes the latest surface mount technology and high level circuit integration to achieve superior performance while minimizing dimension and power consumption. This hardware capability combined with software intelligence makes the board easy to be integrated and used in all kinds of navigation applications or products. The module communicates with application system via RS-232 level with NMEA-0183 protocol.

Features:

- **16 Channels all in view tracking**
- **Reacquisition Time: 1 second**
- **Support Standard NMEA-0183 at 4800 bps baudrate**
- **On-board rechargeable battery sustained real-time clock and memory for fast satellite acquisition during power-up**
- **Dimension/Weight: 50.3mmx42mmx15.5mm/65g**

Applications:

- **Land/Marine Navigation**
- **Telematics**
- **Fleet Management**
- **Asset Tracking**
- **Timing Reference**

Specification:

Features	Description
General	L1 1575.42MHz, C/A code, 16-channel all in view tracking
Sensitivity	-152 dBm (typical)
Accuracy	Position: <15m(95%) without S/A Velocity: 0.1 m/sec without S/A Time: ± 100ns synchronized to GPS time
Acquisition	Cold start: 60sec Warm start: 38sec Hot start : 12 sec
Dynamics	Altitude : 18,000m Max Velocity: 83m/s Acceleration: 2g Max
Datum	WGS-84
Protocol	NMEA-0183 V3.0, Baud rate: 4800
NMEA Message	Default :GGA, GSA, GSV, RMC Optional (GLL and ZDA)
Primary Power	5±5 % V, DC input
DC Current	35 mA
Operation Temperature	-20°C to +60°C
Operating Humidity	5% to 90% non-condensing
Interface connector	Standard : PS/2 Female Optional :USB Cable or Car Charger for PDA
Dimension/ Weight	51mmx42.5mmx17.3mm/78g